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The European Heart Journal on the move: can scientific publishing be further improved?

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The Editors Page

**The European Heart Journal on the Move –
Can Scientific Publishing be further improved?**

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Feldfunktion geändert

Initial Strategy

Every activity needs a strategy – and publishing is no exception to the rule. When the current editorial team had the privilege to manage the flagship of the *European Society of Cardiology*, the *European Heart Journal*, in 2009, an initial and ambitious strategy was implemented¹. The strategy included (1) the nomination of deputy and associate editors from around the world (“*going global*”); (2) the creation of the ESC Journal family with manuscript transfer (“*l’union fait la force*”); (3) improved readability of the journal with the introduction of *CardioPulse*, invited reviews and editorials with high quality illustrations (“*reading must be fun*”); (4) shorter turnaround time for manuscripts of first decision (currently 22 days) and expansion of the *FAST TRACK* expedited review process to both the ESC Hotline Sessions and basic science papers (“*fast and innovative*”) and (5) introduction of novel electronic features (i.e. iPad and iPhone versions, and new media features, i.e. *My Cardio Interview* of hotline presenters, among others; “*modern and young*”, **Table 1**).

Early Achievements

Thanks to the help of our editors, editorial board members, and numerous reviewers as well as the continued support of the board of the *European Society of Cardiology*, the major aims of the initial strategy were accomplished: Indeed, the journal has received an increasing number of manuscripts (with 3,800 submissions expected this year), transferred a growing number of suitable papers to the specialty journals (currently around 500 per year), published a large number of hotline papers presented at the *European Society of Cardiology* Annual Congress, the *American Heart Association* Scientific Sessions or the *American College of Cardiology* and is present at national and specialty congresses with its “*Best of the EHJ Sessions*”. Furthermore, its revamped homepage is widely visited, papers and guidelines are downloaded in large numbers, and *My Cardio Interview* videos have been visited by several thousands of viewers.² Last, but not least, we have received highly encouraging comments from our readership and a consistent increase in impact factor, now 10.5 (**Fig. 1**).

¹ Lüscher TF, Gersh B, Brugada J, Landmesser U, Ruschitzka F, Serruys PW on behalf of the new editorial board: The European Heart Journal goes global – the road ahead of the editorial team 2009-2011. *Eur Heart J* 2009; 30:1-5.

² Nallamothu B, Lüscher TF Moving from Impact to Influence: Measurement and the Changing Role of Medical Journals. *Eur Heart J* 2012; in press.

Growing ESC Journal Family

In 1980, the *European Heart Journal* started as a stand-alone publication under the leadership of Desmond Julian³ with a modest number of submissions and no impact factor. Under the leadership of 4 succeeding editors, the journal made it to center stage in its field.⁴ As a consequence, the number of submitted manuscripts increased markedly (**Fig. 1**) and the acceptance rate has declined to around 11% currently. Since space constraints resulted in the need to decline several high quality manuscripts, the creation of a family of ESC journals became a necessity. This is particularly relevant, since many papers rejected by the *European Heart Journal* have value for colleagues working in more specialized fields of cardiovascular medicine.

Fortunately, as early as 1999, the *European Society of Cardiology* had introduced two specialty journals, i.e. *Europace*, focusing on arrhythmias and pacing, and the *European Journal of Heart Failure*. Over the years, an increasing number of specialty journals were created (**Fig. 2**). Most recently, *EuroIntervention* and the *European Heart Journal Acute Cardiac Care* have joined the *ESC Journal Family*. Furthermore, the *European Journal of Echocardiography* expanded its scope as of this year under its new name *European Heart Journal Cardiovascular Imaging*. Finally, the *European Journal of Cardiovascular Prevention and Rehabilitation* changed its name to *European Journal of Preventive Cardiology*. Today, the *ESC Journal Family* comprises nine journals encompassing the entire spectrum of cardiovascular medicine (**Fig. 2**). Importantly, all but the newest one of these journals have received respectable impact factors, in particular, *Cardiovascular Research* with 6.064 and the *European Journal of Heart Failure* with 4.895.⁵

Manuscript Transfer

The principle of manuscript transfer is to offer excellent, but more specialized papers that are less suitable for publication in the main journal to a specialty journal editor for consideration based on the reviews obtained by the *European Heart*

³ Julian D. *Eur Heart J* 1980; 1:1-3.

⁴ Lüscher TF, Dedecke S, Gersh B, Landmesser U, Serruys P, Rogers S, Ruschitzka F. Happy Birthday *European Heart Journal* – in 30 Years from Cinderella to Center Stage. *Eur Heart J* 2011; 31:1945-1950.

⁵ Lüscher TF, Ruschitzka F, Landmesser U, Voors AA, van Gilst WH, van Veldhuisen DJ. The *European Heart Journal* and the *European Journal of Heart Failure*: Partners in Scientific Publishing. *Eur J Heart Fail* 2012; in press.

Journal. Thus, only manuscripts that have been reviewed (currently 74% of the submissions) are eligible for transfer, provided they have received favourable reviews and are not considered by the main journal. The specialty editors must then decide within 48 hours whether or not they would be willing to reconsider a revised version of the manuscript based on the initial reviews. Obviously, no final commitment is made, but the authors have the opportunity to quickly resubmit a revised version of their manuscripts and hopefully publish their work faster than with any other option.

Since 2009, the *European Heart Journal* has transferred almost 1,800 manuscripts (**Fig. 3**) to different members of the *ESC journal family*. This transfer option was accepted by the specialty editors in over 1,000 of the cases. Overall, those manuscripts transferred were accepted by the editors for transfer in 50% of the cases. Of these offers, 80% were accepted by the authors and later resubmitted in a revised version to the specialty journal. Eventually, 75% of transferred manuscripts were accepted and published. Of note, the acceptance by the authors depended to a large extent on the impact factor of the specialty journal that was offered for resubmission (**Fig. 3**). Indeed, the author acceptance rate was the highest with the *European Journal of Heart Failure* (80%; IF 4.896), lower with the *European Journal of Preventive Cardiology* (50%; IF 2.634), the lowest with *Europace* (40%; IF: 1.980), and the *European Journal of Echocardiography* (45%; IF 2.371). Manuscript transfer with the latest member of the ESC Journal family, the *European Heart Journal Acute Cardiac Care* began only in March of this year and 26 manuscripts have been transferred thus far. Since the *European Heart Journal* has received very few manuscripts on cardiovascular nursing, only one paper could be transferred to this specialty journal (IF 1.711) until now. The editors hope that through that process, they can provide an additional number of high quality papers for our readers. Indeed, the citations of transferred papers have been higher than those directly submitted to specialty journals.⁶

Paper versus Electronic?

We are living in the internet era and hence, more and more readers search for information on the net rather than in textbooks or printed products. A survey among our readership revealed that the preference towards electronic versus paper products is age-dependent (**Table 2**). Thus, sooner or later, the majority of our readers will

⁶ Lüscher TF Eur. J. Heart Fail. 2012 (in press).

prefer receiving the *European Heart Journal* and other scientific publications of their interest preferably on their iPad, iPhone or laptop. In response to these needs, most products are now available electronically as an App through a specific link (<http://itunes.apple.com/gb/app/esc-journals/id506513718?mt=8>). Hopefully, these upgrades to electronic media sourcing will apply to all members of the *ESC Journal Family* in the near future.

Feldfunktion geändert

At the *ESC Annual Congress* in Munich this year, participants had the opportunity to choose between either an electronic version only or – at a higher rate – a paper and electronic version of the *European Heart Journal*. It was interesting to see that less than 1% of subscribers chose print, further confirmation of the trend towards paperless reading among cardiologists as well. The increasing use of the *ESC journal platform* rather than paper versions opened many opportunities for new features such as interactive case reports (already introduced in collaboration with the *ESC education committee*), the image bank as well as incisive video interviews with key opinion leaders (*My Cardio Interview*) and possibly twitter links in the future which will be increasingly important for citations of scientific journals.⁷

Open Access?

Traditionally, profit-driven publishing companies disseminate scientific articles worldwide. Their income is derived mainly from subscription fees from individuals and institutions and from advertisements. The authors who actually generate the content of their products as well as most editors and all reviewers perform their work on a voluntary basis. Indeed, in most journals, authors must pay for colour illustrations and, in some instances, even for the amount of printed pages; additionally, they must once and forever transfer the copyrights of their work to the publisher. Access to the published manuscripts is granted only to those who have paid their annual fees, while those who have not subscribed to the journal must pay for every individual article they wish to read. Hence, it is no surprise, that some of the major players in the business such as Elsevier, Wiley-Blackwell and Springer among others are highly profitable.

This business model, however, has come under scrutiny, ever since open access publishing became available. Open access journals such as the *Public Library of Science PloS* charge authors for the publication of their work, but make

⁷ Eysenbach G. Can tweets predict citations? Metrics of social impact based on twitter and correlation with traditional metrics of scientific impact. *J Med Internet Res*. 2011;13:e123.

manuscripts immediately available on line, free of charge. Many have argued that scientific results, particularly those that are supported by governmental institutions or charities, such as the NIH, the EU, the Wellcome Trust or national research agencies and heart foundations should become immediately available free of charge and should not be subject to profit by commercial companies. Indeed, the British government is apparently considering making online publishing mandatory for scientific journals published in Great Britain, and similar discussions are scheduled in the German parliament. While there are many pros and cons related to this issue, restricted access to scientific information is certainly a major criticism of the current business model. A compromise might be to make articles freely available some time after initial publication (for instance, after one year). The *European Heart Journal* currently selects 2 articles in each issue that are openly accessible (“*editor’s choice*”), and free access to the iPad version has also been granted for an initial period of 6 months.

The ESC publications committee and the ESC Board have so far opted against any further steps. While free access may at first seem attractive for readers, it incurs substantially increased publishing costs for authors. Open access may also make it more difficult to financially maintain high quality products since publishers have a genuine interest in publishing as many papers as possible. In any case, electronic publishing will change the way business is done; on the one hand, the costs of printing and mailing are markedly reduced; yet, on the other hand, the income of journals will also decline as subscription fees will decrease under these conditions. Of course, the *European Heart Journal* continues to participate in the Open Oxford platform which allows individual authors to choose to have their works published open access if they desire to share publishing costs. This gives authors greater flexibility, which is an important priority for us.

Kommentar [ma1]: choose

Going Weekly

The *European Heart Journal* has consolidated its position as No. 3 among cardiovascular journals worldwide. Initially, the journal was published quarterly and later twice monthly. Since all premier cardiology journals are published weekly, the *European Heart Journal* will adopt the same publishing frequency as of January 2013. This strategy has several advantages such as increased visibility and more space for educational products such as review articles, current opinions, and

editorials as well as *Cardiovascular flashlights*. Additionally, publication on a weekly basis will also slightly reduce time for print publication of submitted papers. Eventually, it will also increase the impact factor and, in the long run, put the *European Heart Journal* on par with *Circulation* and the *Journal of the American College of Cardiology*. The increasing costs of going weekly will be compensated for by an increasing number of subscribers opting for the electronic version only.

Manuscript Selection

With an acceptance rate of 11%, manuscript selection has become quite a challenge for the editors of the *European Heart Journal*. How to select the most novel, interesting and important papers? The peer review process is still considered the gold standard in scientific publishing, and the *European Heart Journal* has followed this practice ever since its existence. But is it really the right thing to do? Commonly, we tend to date the advent of the peer review process, i.e. the peer assessment of submitted manuscripts to the 1752 Royal Society of London's installment of a "*Committee on Papers*" to oversee the selection and acceptance of submissions to its journal, *Philosophical Transactions*.^{8,9,10}

The advantages of the peer review system were obvious from the start: in contrast to previous practice, the deciding body was no longer a sole person, i.e. the editor, who may or may not have been familiar with the field covered by the manuscripts or may have even written the paper himself. Rather, from then on the review was conducted, by experts in a particular field - initially members of the editorial office - and later, particularly after World War II, external reviewers as well. The peer review system predicates that peers are impartial, just, and honest in their assessment of the quality of a given manuscript and to provide constructive criticism for those seriously considered for publication, but they are also expected to recommend rejection of those of inappropriate quality. Scientists themselves rely on peers, i.e. respected and experienced colleagues, to discuss their findings before making them available to the public at large. Niels Bohr's correspondence with Heisenberg, Einstein, Pauli, and other titans of quantum mechanics for instance is a prominent

⁸ Kronick DA. Peer review in the 18th century scientific journalism. JAMA 1990; 263:1321 – 1322.

⁹ Burnham JC. The evolution of editorial peer review JAMA 1990; 263:1323-1329.

¹⁰ Spier R. The history of the peer review process. Trends Biotechnol. 2002; 20 (8):357 – 358.

example.¹¹ Likewise, most of today's scientists rely on advice from colleagues before submitting their work.

Kommentar [ma2]: colleagues

Quality of the Peer Review System

Does the peer review system live up to these expectations? Richard Horton, Editor-in-Chief of the *Lancet* once said: "Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed, often insulting, usually ignorant, occasionally foolish, and frequently wrong."¹² Is it really that bad? As outlined previously¹³, no one is perfect; and reviewers and editors are not perfect either. Certainly, most editors try their best to follow the principles of good publishing practice^{14,15} and most medical and scientific societies have published rules of proper scientific conduct, among them the *European Society of Cardiology*¹⁶ and the *International Committee of Medical Journal Editors*¹⁷, but this is not enough. What about adding the Churchill quote that "democracy is the worst form of government but better than any other".

With the review process as such, there are several potential dangers: First and foremost, the expert may not really be an expert. Obviously, it is the duty of the editor to select competent reviewers familiar with the field, but with the increasing number of papers and journals, this task is not always easy to fulfil. A common database of reviewers of all *ESC journals*, which is currently under consideration, may facilitate this and avoid multiple invitations that tend to demotivate reviewers. Secondly, the reviewer may be biased, i.e. the findings may challenge his or her favourite hypothesis, he or she may have similar findings and may be eager to delay the findings of competitors in order to publish first, the reviewer may have a personal grudge against the authors or, alternatively, may be a close friend who wants to

¹¹ Fischer EP, Niels Bohr. Physiker und Philosoph des Atomzeitalters. Siedler Verlag München 2012.

¹² Horton R. Genetically modified food: consternation, confusion, and crack-up. *MJA* 2000; 172:148-149.

¹³ Lüscher TF, Gersh B, Hendricks G, Landmesser U, Ruschitzka F, Wijns W. The best of European Heart Journal: Looking back with pride. *Eur Heart J* 2012; 33:1161-1171.

¹⁴ Lüscher TF. Good publishing practice. *Eur Heart J* 2012; 33:557-561.

¹⁵ Lüscher TF, Landmesser U, Ruschitzka F: Standing firm – the European Heart Journal, scientific discoveries and the industry. *Eur Heart J* 2010; 31(10):1157-1158.

¹⁶ ESC Board. Relations between professional medical associations and the healthcare industry, concerning scientific communication and continuing medical education – a Policy Statement from the European Society of Cardiology. *Eur Heart J* 2012; 33:666-674.

¹⁷ De Angelis C, Drazen JM, Frizelle FA, Haug C, Hoey J, Horton R, Kotzin S, Laine C, Marusic A, Overbeke AJ, Schroeder TV, Sox HC, Van Der Weyden MB. International Committee of Medical Journal Editors. A Statement from the International Committee of Medical Journal Editors. *N Engl J Med* 2004; 12:1250-1251.

provide a favour. Additionally, he or she may have financial interests in publishing or rejecting a given paper. Thirdly, the reviewer may be the right choice, but he or she may not have the time to perform a prudent, careful review. The first and latter problems are commonly spotted by experienced editors, while the second is more difficult to deal with.

Kommentar [ma3]: or

Assessing the Peer Review Process

But these are merely assumptions. Do we have data on the quality of the peer review process? The validity of the peer review has been investigated through the examination of more than 500 submission to the *Journal of General Internal Medicine* in 2004/2005.^{18,19} While this is a lower impact journal, the number of submissions is limited and the profile may not be fully representative for the cardiovascular field, the results are still interesting: (1) The peer review process succeeds in selecting high impact articles and dispatching lower impact ones; (2) the inter-rater reliability between individual reviewers, however, is disappointingly low; (3) despite this, editors place considerable weight on the recommendations of reviewers, and (4) the accuracy of selecting the right manuscripts seems to be improved with a greater number of reviewers.

Recently, Winnik et al. analysed over 1,000 abstracts submitted to the Annual Congress of the *European Society of Cardiology* and determined predictors of acceptance and future publication followed for 4 years²⁰: Interestingly, at the congress level, abstracts on basic science, those reporting on at least 100 patients and those with a prospective study design were most likely to be accepted. However, these factors differed from those predicting full-text publication which included academic affiliation and gender. The parameter predicting frequent citations was a randomized study design. Of note, the publication rate of accepted abstracts was 38%, whereas only 24% of rejected ones were published. Furthermore, among published abstracts, those accepted at the *ESC Congress* received higher citation rates than rejected ones.

Kommentar [ma4]: among

¹⁸ Jackson JL, Srinivasan M, Rea J, Fletcher KE, Kravitz RL. The validity of peer review in a General Medicine journal. *PloS One* 2011; 6 (7):e22475.

¹⁹ Kravitz RL, Franks P, Feldman MD, Gerrity M, Byrne C, Tierney WM. Editorial peer reviewers' recommendations at a general medical journal: Are they reliable and do editors care? *PloS One* 2010; 5 (4): e10072.

²⁰ Winnik SH, Raptis DA, Walker JH, Hasun M, Speer T, Clavien P-A, Komajda M, Bax JJ, Tander M, Fox K, Van De Werf F, Mundow C, Lüscher TF, Ruschitzka F, Matter CM. From Abstract to Impact in Cardiovascular Research - Factors Predicting Scientific Quality. *Eur Heart J* 2012; (in press).

Can We Improve Manuscript Selection?

What can we learn from these studies? The peer review system is obviously less than perfect. Can we thus again endorse Churchill's statement about democracy²¹ for our purposes and relax? We certainly should not. Based on these results, there are valid options for improving the process:

Kommentar [ma5]: (are we abusing or endorsing ?)

- Firstly, editors must be more critical about the ratings of reviewers, and carefully check the quality and depth of their reviews, as well as potential personal, scientific and financial conflicts.
- Secondly, appropriate reviewer profiling must be repeated on an annual basis and new reviewers have to be recruited constantly to keep track with the developments of cardiovascular medicine.
- Thirdly, editors should rely on three rather than two reviewers since this appears to increase the accuracy of the selection process. In response to that, the *European Heart Journal* has implemented a policy of always inviting 5 reviewers in an attempt to receive three assessments within the 2-week review period. In our experience, such a system works well.
- Fourthly, the novelty and potential overlap with previous publications should be checked routinely before acceptance using computer-assisted searches – a system that is now in place in many of editorial platforms, including the Editorial Manager™ used by the *European Heart Journal*. This permits more objective assessment of the novelty and, in turn, rating of manuscripts.
- Finally, editors could consider blinding the manuscripts submitted. Indeed, the findings of Winnik et al., i.e. that academic affiliation predicts full-text publication is a concern. While it is possible that papers from academic institutions are of higher quality than those from other institutions, bias cannot be excluded. Furthermore, the fact that gender is also a predictor of full-text publication is another concern. Of note, although in that study there were no differences in acceptance of abstracts at the congress level (which is a blinded process), the rate of full-text publication of female senior authors was significantly lower (19.1 vs. 30.8%) compared to their male colleagues. Furthermore, work in progress suggests that there might also be

Kommentar [ma6]: assessment

Kommentar [ma7]: colleagues

²¹ Churchill W. Speech before the House of Commons, 11 November 1947, London, UK.

geographical biases.²²

Blinded Review?

In response to these findings, the editors of the *European Heart Journal* considered offering blinded review to those opting for it (masking reviewers). But, would it be feasible? Indeed, blinded reviewing would involve a complex process with submission of a blinded and unblinded version of the manuscript. Unlike abstracts, manuscripts will be more difficult to blind, however, since this does not only involve the cover page with authors names and affiliation, but also the methods section (where ethical approval and location of the research facility is frequently mentioned), further sentences such as “as we have shown” as well as the acknowledgments would have to be deleted. Thus, it is unlikely that reviewers would be truly blinded to the submitting authors, particularly when using search engines and for the better known authors.²³

Even when considering these difficulties, is blinded reviewing really desirable? Does it make the review process better? The available evidence says no. Indeed, in a randomized controlled trial of masked and regular submissions, manuscript review quality as assessed on a 5-point Likert scale by editors and authors did not differ.²⁴ It remains possible that citations and long-term recognition may still differ since this has not been studied in depth. Nevertheless, it appears that masking reviewers to the identity of the submitting authors does not considerably improve the reviews to compensate for the considerable work involved to allow for such a process.

Open Review?

On the other hand, currently the identity of reviewers is masked to the authors. In the age of transparency, a frequently discussed issue is whether or not reviewer names and comments should be kept anonymous or whether they should be made public during and/or after the review process. As outlined previously¹², maintaining

²² Winnik S, Speer T, Raptis DA, Janina, Walker H, Hasun M, Clavien PA, Komajda M, Bax JJ, Tendera M, Fox K, Van F de Werf, Mundow C, Lüscher TF, Ruschitzka F, Nallamothu B, Matter CM. The Wealth of Nations and the Dissemination of Cardiovascular Research. *Eur Heart J* 2012;(in press).

²³ Cho M.K., Justice A.C., Winker M.A., Berlin J.A., Waeckerle J.F., Callaham M.L., Rennie D. Masking author identity in peer review. What factors influence masking success? *J. Amer. Med. Ass.* 1998; 280: 243 – 245.

²⁴ Justice A.C., Cho M.K., Winker M.A., Berlin J.A., Rennie D. Does masking author identity improve peer review quality? A randomized controlled trial. *J. Amer. Med. Ass.* 1998; 280: 240 – 242.

the anonymity of reviewers, which is practiced by most journals, permits more honest reviews, since the reviewer is protected from any possible retaliation by a disgruntled author and is in a position to make open statements in his/her review. Indeed, as revealed in a survey by the former Editor-in-Chief of *Cardiovascular Research* David Hearse²⁵, only 56% of the reviewers would still be willing to help in the evaluation of manuscript, if full transparency be implemented. Thus, journals can obviously not afford such a system.

The question whether the anonymous review should be made available to the readers as an online supplement is another issue; this certainly is a possibility today as space restrictions do no longer pose a counter argument. Nevertheless, it would be difficult for the uninvolved reader to follow the arguments of the reviewers on several versions of a manuscript. Thus, if considered, such a system would have to make all versions of a manuscript available as well.

Precision and Misconduct

When selecting manuscripts based on their novelty, importance and interest, editors must be increasingly aware of scientific misconduct or - to use a morally less pejorative expression - of the precision of the work submitted: Are the data accurately reported? Precision refers to the principle that all data reported have indeed been obtained as described in the methods section and analyzed with proper statistics. The latter is assured by a statistical review, which is performed by all top journals for all papers seriously considered for publication. For that purpose, the *European Heart Journal* has assigned Sabina Murphy, a statistical deputy editor who specifically looks at these aspects with a team of expert statisticians. This is increasingly important, particularly in clinical research where power calculations, superiority and non-inferiority designs²⁶ as well as various types of analyses of variance including propensity analysis^{27,28} must be used.

Kommentar [ma8]: pejorative

Kommentar [ma9]: where

Can editors detect “cooking”, “trimming” and forgery of data? Obviously, this is

²⁵ Hearse D. Anonymity of reviewers. *Cardiovasc. Res.* 1194;28:1133.

²⁵ Fabiato A. Anonymity of reviewers. *Cardiovasc. Res.* 1194;28:1134-1139.

²⁶ Head SJ, Kaul S, Bogers AJJC., Kappetein AP. Non-inferiority study design: lessons to be learned from cardiovascular trials. *Eur Heart J* 2012; 33:1318-1324.

²⁷ Heinze G, Jüni P. An overview of the objectives of and the approaches to propensity analysis. *Eur Heart J* 2011; 32:1704-1708.

²⁸ Dahabreh IJ, Sheldrick RC, Paulus JK, Chung M, Varvarigou V, Jafri H, Rassen JA, Trikalinos TA, Kitsios GD. Do observational studies using propensity score methods agree with randomized trials? A systematic comparison of studies on acute coronary syndromes. *EurHeart J* 2012; 33:1893-1901.

very difficult; however, giving the marked increase in retractions for fraud in recent years, particularly in high impact journals²⁹, reviewers and editors should be aware of it. Indeed, data fabrication and falsification of research appear to be much more prevalent than anticipated. In a meta-analysis of survey data, Fanelli found that 2% of scientists admitted to have fabricated data, and up to 33% admitted other questionable research practices such as dropping data points that did not fit, changing study design, methodology and/or results in response to pressures from competitors or funding sources.³⁰ On the other hand, widely available appropriate computer-assisted programs can easily assist in ascertaining plagiarism, auto-plagiarism and “slicing and dicing”, i.e. “salami” publishing.

Kommentar [ma10]: programs

Conclusions

While scientific publishing is less than perfect, overall, it has achieved an impressively high level in past decades. It can certainly be further improved, and, together with highly dedicated and motivated associated editors and reviewers, the current editorial team of the *European Heart Journal* is committed to taking that very road into the future. For those who remain unsatisfied, Salvador Dali's words may be a consolation: “*Have no fear of perfection, you will never reach it!*”

Kommentar [ma11]: committed

Kommentar [ma12]: “Have no fear of perfection, you'll never reach it!”

²⁹ Fang FC, Casadevall A. Retracted science and the retraction index. *Infect. Immun.* 2011;79(10):3855-3859.

³⁰ Fanelli D. How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data. *Plos One* 2009; 4 (5):e5738.

Table 1: New features introduced in the European Heart Journal 2009 – 2011 and as of 2012 (* = Effective as of 2013).

2009 – 2011	2012 – 2014
Manuscript transfer (ESC Journal Family)	Weekly edition*
International deputy and associate editors	Optional blinded review*
CardioPulse	iPhone and iPad version of ESC Journal Family
Shorter turnaround time (20 days)	Interactive <i>Cardiovascular Flashlights</i>
ESC Hotline <i>FAST TRACK</i>	Common reviewer database of ESC Journal Family
<i>FAST TRACK</i> Basic Science	
EHJ Image Bank	
<i>My Cardio Interview</i> of Hotline Sessions (currently, more than 100 individual interviews)	
<i>The Best of EHJ Sessions</i> at ESC and Specialty congresses	The Best of EHJ Sessions at national society congresses

Table 2: Results of a survey among readers of the *European Heart Journal* regarding preferences for an electronic vs. Paper version.

	How valuable is the online version of the EHJ?			
AGE	Not at all valuable	Not very valuable	Quite valuable	Very valuable
Under 25	0.00%	50.00%	50.00%	0.00%
25-34	1.47%	7.35%	35.29%	55.88%
35-44	3.17%	10.79%	29.21%	56.83%
45-54	3.67%	16.38%	28.85%	51.10%
55-64	6.16%	14.38%	32.53%	46.92%
65 and over	13.48%	20.22%	32.58%	33.71%

Legends to the Figures

- Fig. 1:** Growth of the *European Heart Journal* over time: Manuscript submissions (A) as well as the Impact Factor (B) markedly increased over time. (Data form Oxford University Press 2012)
- Fig. 2:** The *ESC Journal Family* with current impact factors and editors.
- Fig. 3:** Overview of manuscript transfer within the ESC Journal family since 2009. Given are the data for each of the specialty journals and the acceptance rates of editors and authors. (Data form Oxford University Press 2012)